

Report

Dayton Aviation Heritage National Historical Park

■ 1.0 Site Description

The Dayton Aviation Heritage National Historical Park (NHP), located in Dayton, Ohio, was established to commemorate the legacy of the Wright Brothers and poet Paul Laurence Dunbar and their association with the Miami Valley. The Wright Brothers, through their invention of powered flight, enabled the development of aviation and made a significant contribution to human history. Paul Laurence Dunbar, a poet and childhood friend of the Wright Brothers, achieved international recognition for his literary work. His work contributed to a growing social consciousness and cultural identity for African-Americans in the U.S. The NHP, operated by the NPS, is a cooperative partnership among federal, state, and local governments and the private sector. It consists of four physically separate units:

- **The Wright Cycle Company** – From 1895 to 1897, the Wright Brothers operated their bicycle manufacturing and printing businesses at 22 South Williams Street. The brothers developed initial concepts for flying machines at this site. The Wright Cycle Company is the last remaining site in Dayton related to the brothers' bicycle business. Adjacent to the Cycle Company is the Hoover Block. Prior to their bicycle business, the Wright Brothers operated a printing business in the Hoover Block at 1060 West Third Street. Among their output, the Wright Brothers printed a newspaper edited by their friend, Paul Laurence Dunbar. This business remained in this building until 1895.



- **The Wright Flyer III and Carillon Historical Park** – The 1905 Wright Flyer III is on exhibit at Carillon Historical Park, 2001 South Patterson Boulevard. This is the first craft capable of controlled flight. With the Wright Flyer III, the Wright Brothers learned the fundamentals of controlling a powered aircraft.



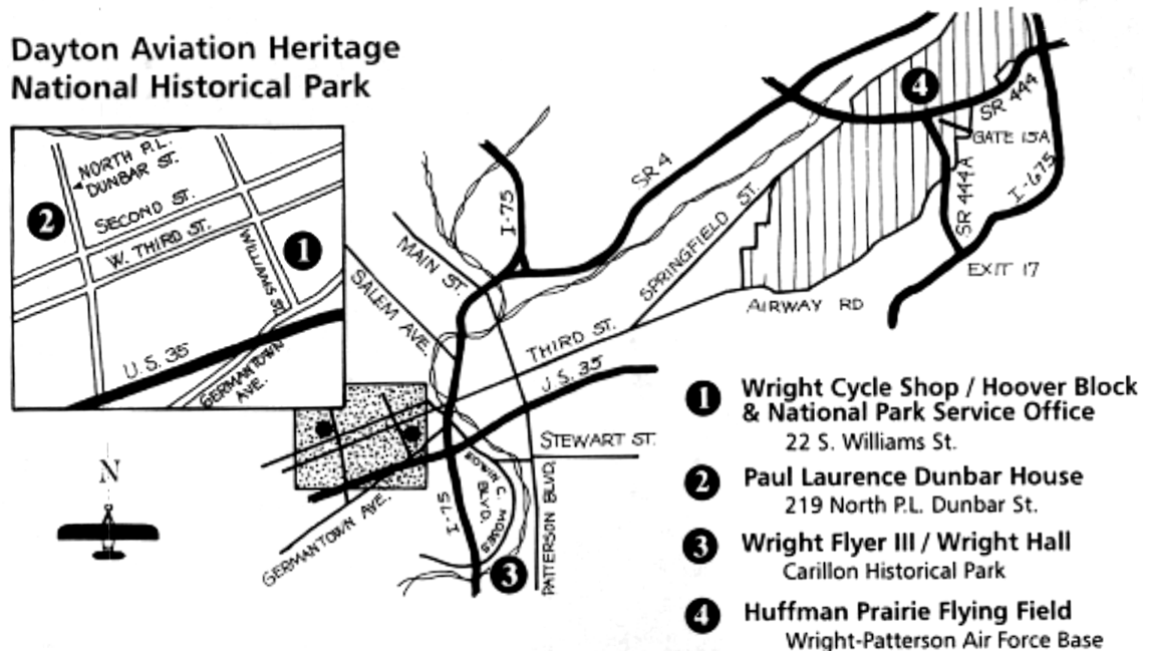
- **Paul Laurence Dunbar House** – Dunbar purchased the house at 219 North Summit Street (now Paul Laurence Dunbar Street) for his mother. He lived in the house from 1903, where he continued to work until his death in 1906. The Dunbar House is maintained as it was at the time of the poet's death, containing many original furnishings and artifacts, including a bicycle given to Dunbar by the Wright Brothers.



- **Huffman Prairie Flying Field** – After their first successful flights in 1903 at Kitty Hawk, North Carolina, the Wright Brothers returned to Dayton to refine their flying machines and flying techniques. They erected a hangar for their plane on Huffman Prairie outside of Dayton. A second hangar for the Wright Flyer III was built in 1905. In 1910, a third hangar was built that became the base of the Wright Company School of Aviation, the world's first permanent flying school. The Flying Field is located on what is now Wright-Patterson Air Force Base.

It should be emphasized that each of these sites is physically separated from each other site, limiting the ability of visitors to visit all sites without some form of transportation, with the exception of the Dunbar House and the Cycle Company which are within three

blocks of each other. Huffman Prairie, located at the eastern edge of Dayton is approximately nine miles from the Cycle Company, which is west of downtown Dayton. Carillon Historical Park is approximately three miles south of the downtown area. A map showing the location of the various sites is shown below.



Exhibits operated by the NPS are located at the Wright Cycle Company building. Exhibits and visitor services are also available at the Dunbar House State Memorial and at Carillon Historical Park. Self-guiding facilities are available at Huffman Prairie Flying Field. Park facilities are currently under development and, presently, there is no visitor center. A general management plan for the NHP will be developed over the next several years to guide the overall operation and development of the Park. The Dayton Aviation Heritage Commission, appointed by the Secretary of the Interior, and the Wright-Dunbar State Heritage Commission, appointed by the Governor of Ohio, will advise the NPS in the development and operation of the Park.

Because the Park is under development, visitor statistics are limited. The Superintendent estimates previous annual visitation to all sites at approximately 40,000 to 50,000. Based on visitation to similar parks elsewhere and also due to convenient access from the interstate highway system, visitation is expected to reach 500,000 annually once the Park is fully developed.

Among other attractions in the Dayton area related to the NHP is the United States Air Force Museum. Located on Wright-Patterson Air Force Base, near Huffman Prairie, it is the largest military aviation museum in the world, with nearly 300 aircraft, missiles, U.S. presidential planes, and a IMAX theater. The Museum draws over one million visitors annually and visitation is expected to grow to over two million visitors annually within the near future.

■ 2.0 Existing ATS

As a mature urban community, public transportation service is provided throughout the City of Dayton by the Miami Valley Regional Transportation Authority. These services are primarily provided by conventional diesel buses but MVRTA also operates a fleet of electric trolley buses through the downtown area and along Third Street. This electric trolley bus service is available from downtown Dayton to the Wright Cycle Shop/Hoover Block. Bus service is available to both Carillon Park and to Huffman Prairie and there is also bus service directly to the Air Force Museum during the Museum's normal hours of operation. MVRTA also operates the Dayton Flyer, a rubber-tired trolley in downtown Dayton. While public transit services are available to each of the individual NHP sites, there is no coordinated or consolidated service linking the various sites and Park officials believe very few visitors utilize existing MVRTA services to access NHP facilities. The Superintendent indicated that visitors generally do not understand the MVRTA system and that the availability of information is very limited. Furthermore, public transit services make numerous stops and require connections between routes which would limit the appeal of such a service for recreation or tourism.

■ 3.0 ATS Needs

Representatives of the NHP and the Dayton Aviation Heritage Commission (DAHC) strongly indicated that a comprehensive transportation service linking the various NHP sites is essential to support utilization of the Park and growth in visitation. The Superintendent describes the NHP as an urban park consisting of a collection of sites. This entails a variety of issues with implications for transportation, as follow:

1. **Parking** – Because of compact urban development patterns, there is an inability to develop adequate parking facilities at many of the sites (with the exception of Carillon Park). Only limited parking is presently available and there is insufficient land available to expand.
2. **Neighborhood Traffic** – There are proposals underway to revitalize the neighborhood along Third Street in the vicinity of the Cycle Shop. This could potentially result in an increased intensity of development which could also lead to increased traffic congestion.
3. **Conflict in Neighborhood Objectives and Land Uses** – There is concern that increased business and/or residential development in the vicinity of the NHP sites may be inconsistent with NHP preservation objectives.
4. **Restricted Access** – Huffman Prairie is located on a secured military installation. At times, the Wright-Patterson Air Force Base is closed to the public for security reasons. At all other times, visitors must go through the Wright-Patterson visitors center and secure a gate pass.

According to the Superintendent and the Director of the DAHC, a transportation system is needed to support the NHP that can be an attraction in itself. The concept of a “heritage trolley” has been promoted which would be designed to closely replicate the type of trolley service that the Wright Brothers would have used to travel between the Cycle Shop and Huffman Prairie. Such a trolley would help reduce overall traffic volumes and parking demand while providing a convenient and efficient means of connecting the various NHP sites. It could also facilitate access to Huffman Prairie at the Air Force Base by controlling visitor access to the NHP site only. The trolley in itself is conceived of as an element of the Park which can stimulate interest and visitation, similar to the trolley at the Lowell NHP. According to the Superintendent, the “ideal” service would connect the Huffman Prairie Flying Field, the Air Force Museum, and west Dayton with connecting service to Carillon Park. It would converge in downtown Dayton and provide access to hotels, the existing convention center, and the Riverscape area, a recreation area and Park currently under construction along the Great Miami River.

Currently, a Major Investment Study is underway under the auspices of the Miami Valley Regional Planning Commission (MVRPC), the Metropolitan Planning Organization for the Dayton Metropolitan area, to define and analyze alternative transportation services which could connect the various NHP sites. Various alternatives are under consideration, including a “vintage” trolley which would provide connections between NHP sites, the Air Force Museum and other attractions in Dayton such as the minor league ballpark which is currently under construction. The results of the MIS will be finalized this winter. The MPO will then decide which alternatives, if any, should proceed into a preliminary design stage. Funding to proceed into the next stage of analysis has already been obtained through federal sources.

■ 4.0 Basis of ATS Needs

As indicated above, public transit service is provided to all four of the Dayton Aviation Heritage NHP sites by either electric trolley or diesel urban bus operated by the Miami Valley Regional Transit Authority. However, these sites (with the exception of the Cycle Shop and Dunbar House) are located at substantial distance from each other, complicating the ability of a visitor who may be unfamiliar with the regional transit system to use public transit to visit the NHP sites. Furthermore, expected growth in visitation will strain the ability of existing infrastructure to support growth in auto trips to the various sites. NHP officials believe a coordinated, connected transit service would greatly enhance the quality of the visitor’s experience at the Park and, depending on the form of such service, could potentially become an element of the Park. In concept, such a service could be implemented in phases with the first phase involving a connection between downtown and west Dayton (Cycle Shop and Dunbar House), the second phase connecting the Air Force Museum and Huffman Prairie Flying Field, and the third phase connecting with these two services at either end.

■ 5.0 Persons Interviewed

Larry Blake, Superintendent

Tony Sculimbrene, Executive Director, Dayton Aviation Heritage Commission